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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,894	07/10/2001	Ching-Chiang Yu	MR1115-330	5836

4586 7590 10/07/2003

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3458 ELLICOTT CENTER DRIVE-SUITE 101  
ELLICOTT CITY, MD 21043

EXAMINER
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WONG, ALBERT KANG

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 10/07/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/900,894

Applicant(s)

YU, CHING-CHIANG

Examiner

Albert K Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. This Office action is in response to the application filed July 10, 2001. Claims 1-10 are pending.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase “absolutely easy for the users’ finger to operate” is indefinite. It is not clear what is considered easy. Further, applicant is merely reciting a desired functionality without the means necessary for providing the functionality.

Regarding claim 2, a scroll-control-ball is not a multi-function key since it is not a key but an input device. It appears applicant intended to say that the keyboard comprises a scroll-control-ball.

Regarding claim 3, the claim is grammatically incorrect. Also, it is not clear how keys can comprise a board with additional keys. It appears that applicant intended to recite that the keyboard has a board with cursor keys.

Regarding claim 5, it is not clear what constitutes a recovery key. Such a key is not conventional and it is not defined in the specification.

Regarding claim 6, please note the misspelling of “wherein”.

Regarding claim 10, this claim is not a complete sentence. It appears that the first 6 words were accidentally submitted.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to teach how to make the finger print device and how to integrate such a device with a multi-function key. The mere suggestion of a desired combination is not sufficient to enable the combination due to the complexity of the combination. Applicant has provided no details regarding the key or the finger print device.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fort 5,228,791.

Regarding claim 1, Figure 2b shows a numeric key pad which is found on the right side of most conventional keyboards. The keys function as cursor keys as well as provide numerical input. Thus, they are multi-function keys which are located in a position that is easy for the user's finger to operate.

Regarding claim 3, the keys on the numeric keypad are on a printed circuit board which supply cursor functions.

Regarding claim 9, the Num Lock key functions as a function-exchange key to switch the key function between a cursor function and a numerical function.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fort 5,228,791 in view of Batio 6,081,207.

Regarding claim 2, Fort does not show a scroll-control-ball. Batio teaches a keyboard with a track ball (item 4). A track ball is conventionally used for scroll control. It would have been obvious to incorporate a track ball into the keyboard in Fort since Batio suggests that a track ball with its well known utility may be incorporated into any keyboard to add this desired function. This would eliminate the need for a separate control device.

10. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fort 5,228,791 in view of Chou 6,445,381.

Regarding claim 4, Fort does not teach a multi-function key with the functions of cut, copy etc. It is recognized that such editing functions are conventional and are typically activated via key strokes on the keyboard or a drop down menu. Chou teaches multi-function keys with programmable functions. It would have been obvious to one of ordinary skill in the art that any keyboard activatable function may be programmed onto a key. The association of conventional editing functions would have provided the obvious advantage of accessing the particular function via a dedicated key without using a cumbersome menu.

Regarding claim 5, the undo function may be considered a recovery function. As recited above, it would have been obvious to dedicate any function to a particular key to provide easy access to the function.

Regarding claim 6, the printing function is shown in Fort. It would have been obvious to place the function on a multi-function key to reduce the number of buttons on the keyboard.

Regarding claim 7, see Figure 1 of Chou.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fort 5,228,791.

Regarding claim 10, Fort does not show a LCD display light to indicate the status of digits and upper and lower case. Instead, it shows conventional LED indicator lights to indicate Num Lock and Caps Lock status. One of ordinary skill in the art would recognize that it would have been obvious to use a LCD light provides the same function as an LED, namely indication, because the functions are equivalent. One is merely substituting one indicator means for another well known indicator means.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fort 5,228,791 in view of Bault 6,353,472.

Regarding claim 8, Fort does not teach a finger-print-identification function device. Bault teaches a finger print reader for authentication purposes in Figure 8. The device authenticates the user and identifies qualified users and is located on a keyboard. Although the device is not located on a key it would have been obvious that the device may be located on any suitable surface. By locating the device on a key, the keyboard would be more compact.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Numerous prior art are cited but not applied. They are considered highly relevant

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because they teach alternative embodiments. Applicant should consider all of the cited references when preparing a response.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K Wong whose telephone number is 703-305-8884. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



Albert K. Wong  
September 28, 2003